Wayland Baptist University

WBU Online Campus

Kenneth L. Maddox School of Mathematics and Sciences

Course Syllabus

# Wayland Mission Statement

Wayland Baptist University exists to educate students in an academically challenging, learning-focused, and distinctively Christian environment for professional success and service to God and humankind.

# Course Title

Course Number and Title: BIOL 1400 VC01 Life Science

Term: Spring 2nd 8-weeks, 2024

# Instructor Information

## Name of Instructor: Ms. Corin Olivas

## Office Phone Number: (806) 291-1128

## WBU Email Address: olivasc@wbu.edu (All emails must include “BIOL1400 VC01” in the email subject line.)

## Office Hours: Arrangements can be made for Zoom meetings or phone calls. Don’t hesitate to contact me!

# Course Information

## Class Time and Location**:** Online

Catalog Description: A general laboratory-based course for non-science majors or minors. Employs the scientific method to discover how living things are organized; acquire materials and energy; respond to their environment; reproduce and develop; and adapt to their environment. Attention also given to bio-ethical issues in contemporary biology. Lecture three hours, laboratory three hours. $90 fee.

Prerequisite: None.

Required Textbook: *Concepts of Biology* from OpenStax, **ISBN 1947172034** [www.openstax.org/details/concepts-biology](http://www.openstax.org/details/concepts-biology)

The book is available in a wide variety of free online formats via the website listed above. You can use the book in whichever format(s) you want; we recommend that you download the entire .pdf so that you always have access to your book. DO NOT OPT OUT OF THIS TEXT OPTION – IT IS FREE AND WE WILL USE IT.

# Course Outcome Competencies

Students will be able to:

1. Explain how living organisms metabolize and self-perpetuate;
2. Explain cell structure and function;
3. Explain basic similarities and differences between plants and animals in terms of morphology and physiology;
4. Explain the ecosystem concept in terms of homeostasis and the effect of perturbations on ecosystems; and
5. Describe the basic classification of living organisms.

# Attendance Requirements

In accordance with university policy, attendance in this course will be documented through a student’s active engagement in weekly assignments, quizzes, or similar course elements requiring deliverables or direct communication between the student and the instructor through the University Learning Management System (LMS). Instructions for completing these assignments will be posted. Failure to complete or participate in the assignments may result in course or grade reductions. Failure to meet posted deadlines (refer to the Calendar Due Date Checklist below for specific assignment submission dates) will result in a grade of zero or point reductions for the assignment affected. **Students missing more than 25% of the class may be dropped from the course.** No make-up assignments or exams will be given, unless arrangements are made in advance of foreseen absences, emergencies excepted.

# Statement on Plagiarism and Academic Dishonesty

Wayland Baptist University observes a zero tolerance policy regarding academic dishonesty. Per university policy as described in the academic catalog, all cases of academic dishonesty will be reported.

See the University’s [Statement on Academic Integrity](https://www.wbu.edu/academics/writing-center/Academic%20Integrity%20Statement%20Pol%208.4.1%20Attch%20Oct%2020222.pdf) and the Student Handbook for additional information related to the consequences and repercussions of academic dishonesty at Wayland Baptist University.

# Disability Statement

In compliance with the Americans with Disabilities Act of 1990 (ADA), it is the policy of Wayland Baptist University that no otherwise qualified person with a disability be excluded from participation in, be denied the benefits of, or be subject to discrimination under any educational program or activity in the university. The Disability Services Coordinator and Academic Coach serves as the coordinator of students with disabilities and must be contacted concerning accommodation requests (office phone: (806) 291-1057). Documentation of a disability must accompany any request for accommodations. **Students should inform the instructor of existing disabilities at the first class meeting.**

# Course Requirements and Grading Criteria

## University Grading System

A = 100-90; B = 89-80; C = 79-70; D = 69-60; F = below 60

I = Incomplete\*; W = Withdrawal

\*A grade of Incomplete is changed if the deficiency is made up by midterm of the next regular semester; otherwise it becomes an F. This grade is given only if circumstances beyond the student’s control prevented completion of work during the semester enrolled, and attendance requirements have been met.

## Final Course Grade Determination

Your course grade will be determined based on the number of points earned on various activities as described below, weighted as follows:

Lecture Exams 50% of final grade

Quizzes 10% of final grade

Reading Assessments 10% of final grade

Laboratory exercises 30% of final grade

1. Students are required to access readings, videos, and podcasts through various internet sources. Assignments may require participation in various interactive tools including discussion boards, journals, online quizzes, or exams, written assignments, and student-produced video or audio files. Access to reliable internet is essential to successful participation in this course.
	1. **All work must be submitted on Blackboard by the listed due dates in the Course Schedule**. Students must contact me in advance via email to request due date extensions. Late work will not be accepted past Wednesday of the final week of class!
2. Students are expected to read textbook assignments and compile a complete set of lecture notes. They are encouraged to become familiar with the recommended reference materials.
3. Lectures are illustrated with a variety of visual aids and microscopic observations. Students are encouraged to email questions if they do not understand the content.
4. Projects and Lab Assignments: Students are required to search scientific references. A short laboratory research project is performed and written up by each student in order to become familiar with scientific methodology.
	1. **Laboratory Special Requirements:** Some of the materials students will need to complete laboratory assignments must be purchased from local stores. These supplies are readily available at most grocery or department stores (e.g., Wal-Mart). Costs will be very moderate. **Therefore, students must have access to a grocery or department store.** Some laboratory activities may require students to document their participation with digital photographs that will be uploaded to the instructor. For example, one lab may require students to visit a state park, botanical garden, or some other learning center focusing on the natural world. This assignment will be documented as a photo-journal that will be submitted for grading in electronic format. **Therefore, students must have access to a digital camera or cell phone.** Students are NOT being asked to purchase a camera with special features.
5. There will be 4 scheduled lecture exams, and they may contain both objective and essay questions.

## Grade Appeals:

Students shall have protection through orderly procedures against prejudices or capricious academic evaluation. A student who believes that he or she has not been held to realistic academic standards, just evaluation procedures, or appropriate grading, may appeal the final grade given in the course by using the student grade appeal process described in the Academic Catalog. Appeals may not be made for advanced placement examinations or course bypass examinations. Appeals are limited to the final course grade, which may be upheld, raised, or lowered at any stage of the appeal process. Any recommendation to lower a course grade must be submitted through the vice president of academic affairs to the Faculty Assembly Grade Appeals Committee for review and approval. The Faculty Assembly Grade Appeals Committee may instruct that the course grade be upheld, raised, or lowered to a more proper evaluation.

# Tips for Success

Life Science contains difficult subject matter for some students, and may require a higher level of effort than many students anticipate. The requirements and recommendations listed below highlight some basic principles that will help you succeed in this course.

* **Time Commitment:** If taken during a 16-week semester in a traditional classroom setting, this course would meet for about 6 hours per week – about 3 hours in lecture and about 3 hours in lab. A good rule of thumb is that students should reserve at least as many hours outside of class as they spend in-class to review material and complete assignments. While WBU Online students have the benefit of flexibility in scheduling when they will review lecture and laboratory materials, the content of this course is NOT reduced from the traditional format and will require **AT LEAST** the same level of effort as the in-class version of the course! Therefore, to succeed in this course, students should be prepared to invest a **MINIMUM** of 24 hours per week, with additional effort required to complete lecture or lab assignments or to prepare for exams.
* **Read the book and other assigned materials:** The required textbook will provide additional information to topics discussed in class, and will help in processing lecture material. Reading and studying ahead will also ensure you are prepared for in-class quizzes (especially if they’re pop quizzes!).
* **Take thorough lecture notes:** Do not attempt to write down PowerPoint notes word for word! Focus on the key points per slide.
* **Use study questions and handouts as guides:** There are questions at the end of each chapter in your text, and many web-based study aids provided by the textbook publisher. Use them to help you prepare for quizzes and exams! I also generally try to post study guides to help identify the key terms and concepts we focused on – use them as a checklist to organize your final review of the material that will be covered on an exam.
* **Don’t be afraid to ask questions, or to ask for help!**

# Tentative Course Outline and Schedule

The following class schedule is subject to modification by the instructor. Topics and reading assignments may include only a portion of the select chapters.

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| **BIOL 1400 VC01 S2 8wk** |
| Due Date Calendar + Checklist |
| All assignments, exams, etc. will be due by 11:59pm Central Time of their respective calendar due date. |
| Week | Date | Day |   | Tasks (quizzes, readings, etc.) | Discussions + Labs |
| 1 | 25-Mar | Monday |   | Begin Unit 1 readings - Ch. 1-5 | Class Introduction Discussion - due 3/30 |
|   | 26-Mar | Tuesday |   |   |
|   | 27-Mar | Wednesday |   | Reading Assessment 1 opens |
|   | 28-Mar | Thursday |   | Quizzes 1 & 2 open |
|   | 29-Mar | Friday |   |   |
|   | 30-Mar | Saturday |   | Lecture Exam 1 opens |
| 2 | 31-Mar | Sunday |   |  | Lab 1: Enzymes - due 4/6 |
|   | 1-Apr | Monday |   |   |
|   | 2-Apr | Tuesday |   |   |
|   | 3-Apr | Wednesday |   | Reading Assessment 1 due |
|   | 4-Apr | Thursday |   | Quiz 1 due |
|   | 5-Apr | Friday |   |  |
|   | 6-Apr | Saturday |   | Lecture Exam 1 due |
| 3 | 7-Apr | Sunday |   | Begin Unit 2 & 3 readings - Ch. 6-9 | Lab 2: Respiration (Cell and Yeast Metabolism) - due 4/13(Extra Credit Ginger Ale Lab due 4/13) |
|   | 8-Apr | Monday |   |  |
|   | 9-Apr | Tuesday |   | Reading Assessment 2 opens |
|   | 10-Apr | Wednesday |   | Quiz 2 opens |
|   | 11-Apr | Thursday |   |   |
|   | 12-Apr | Friday |   | Lecture Exam 2 opens |
|   | 13-Apr | Saturday |   |  |
| 4 | 14-Apr | Sunday |   |   | Lab 3: DNA - due 4/20 |
|   | 15-Apr | Monday |   |   |
|   | 16-Apr | Tuesday |   |   |
|   | 17-Apr | Wednesday |   | Reading Assessment 2 due |
|   | 18-Apr | Thursday |   | Quiz 2 due |
|   | 19-Apr | Friday |   |   |
|   | 20-Apr | Saturday |   | Lecture Exam 2 due |

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| 5 | 21-Apr | Sunday |   | Begin Unit 4 readings - Ch. 16 & 18 | Lab 4: Diet and Nutrition - due 4/27 |
|   | 22-Apr | Monday |   |   |
|   | 23-Apr | Tuesday |   | Reading Assessment 3 opens |
|   | 24-Apr | Wednesday |   | Quiz 3 opens |
|   | 25-Apr | Thursday |   |   |
|   | 26-Apr | Friday |   | Lecture Exam 3 opens |
|   | 27-Apr | Saturday |   |   |
| 6 | 28-Apr | Sunday |   |   | Lab 5: Reproduction - Life's Greatest Miracle - due 5/4 |
|   | 29-Apr | Monday |   |   |
|   | 30-Apr | Tuesday |   |   |
|   | 1-May | Wednesday |   | Reading Assessment 3 due |
|   | 2-May | Thursday |   | Quiz 3 due |
|   | 3-May | Friday |   |   |
|   | 4-May | Saturday |   | Lecture Exam 3 due |
| 7 | 5-May | Sunday |   | Begin Unit 5 readings - Ch. 19-21 | Lab 6: Ecology - Queen of Trees - due 5/11 |
|   | 6-May | Monday |   |   |
|   | 7-May | Tuesday |   | Reading Assessment 4 opens |
|   | 8-May | Wednesday |   | Quiz 4 opens |
|   | 9-May | Thursday |   |   |
|   | 10-May | Friday |   | Lecture Exam 4 opens |
|   | 11-May | Saturday |   |   |
| 8 | 12-May | Sunday |   |   |   |
|   | 13-May | Monday |   |   |   |
|   | 14-May | Tuesday |   |   |   |
|   | 15-May | Wednesday |   | Reading Assessment 4 due | **LAST DAY TO ACCEPT LATE WORK!** |
|   | 16-May | Thursday |   | Quiz 4 due |   |
|   | 17-May | Friday |   |   |   |
|   | 18-May | Saturday |   | Lecture Exam 4 (Final) due |   |